CLAIMS:

1. An apparatus for coalescing droplets of one phase from a fluid comprising two or more phases, said apparatus comprising a chamber (1), a coalescing medium (5) comprising a plurality of substantially elongate members (30) each having a surface area, a retaining member (4, 14) to which the coalescing medium (5) is secured, an inlet (21) to said chamber, and an outlet (22) from said chamber, said inlet and outlet being positioned such that fluid flowing from said inlet (21) to said outlet (22) flows in a flow direction in contact with said surface area of said coalescing medium, the elongate members (30) extending substantially in the flow direction, characterised in that said chamber is formed from a substantially straight pipe having a first end and a second end and a branch intermediate said first and second ends, said outlet (22) being arranged at the first end and an access cover (6) being arranged at the second end, said inlet (21) being arranged at the free end of said branch, wherein said access cover is adapted to allow removal and replacement of the retaining member (4, 14) and coalescing medium (5).

2. An apparatus in accordance with Claim 1, wherein said retaining member (4, 14) is adapted to be removably engaged within said chamber.

3. An apparatus in accordance with Claim 1 or Claim 2, wherein the interior of said chamber is provided with a shoulder (7) adapted to engage with said retaining member.

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4. An apparatus in accordance with Claim 3, wherein said access cover (6) is adapted to hold said retaining member (4, 14) against said shoulder (7) when the access cover (6) is attached to the pipe (1).

5. An apparatus in accordance with any of Claims 1 to 4, wherein said retaining member (4) is provided with one or more apertures (11) for securing said coalescing medium (5) to said retaining member (4).

6. An apparatus in accordance with any preceding claim, wherein said plurality of elongate members are substantially mutually aligned fibres (30).

7. An apparatus in accordance with Claim 6, wherein said coalescing medium (5) comprises ribbon-like fibres.

8. An apparatus in accordance with Claim 6, wherein said fibres (30) are selected from the group of materials comprising polypropylene, metal wire, animal hair, polyethylene, polyester, and glass wool.

9. An apparatus in accordance with any of Claims 1 to 6, wherein said coalescing medium (5) comprises one or more polypropylene ropes.

10. A method for coalescing droplets of one phase from a fluid comprising two or more phases using the apparatus of any preceding Claim, in which the fluid is caused to flow in a flow direction through the chamber (1), each of the plurality of

substantially elongate members (30) being substantially aligned in the flow direction, such that the fluid flows in contact with said surface area of said coalescing medium (5) and droplets of a first phase of said fluid coalesce on said surface area.

11. A method in accordance with Claim 10, wherein the fluid is a liquid.

12. A method in accordance with Claim 11, wherein the fluid is a mixture of water and oil, and wherein the first phase is oil.

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